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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary**Application No.**

10/574,169

Applicant(s)

SCHEERING, CHRISTIAN

Examiner

JOE CHACKO

Art Unit

2456

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 April 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9-16 and 18-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 9-16 and 18-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/GS/US)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This office action is in response to the reopening of prosecution after Pre-appeal request filed on 4/12/2010. Claims 9-16 and 18-29 have been examined and are pending.

Response to Arguments

2. Applicant's arguments, see Appeal brief request, filed 4/12/2010, with respect to the rejection(s) of claim(s) 9-16 under 35 U.S.C. 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of the references described below.

Examiner Comments

3. The Examiner would like to suggest that the Applicant amend their independent claims to include other components of the invention so as to narrow the scope of the claim. The claims as presently constituted are too broad to be allowable. The Examiner would like to point out page 10-11 in the specification as consisting of components that can be added to the claims to further prosecution.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. **Claims 9-11 and 13-16, 18** are rejected under 35 U.S.C. 103(a) as being unpatentable over Jung (U.S. Patent Pub. No. 2002/0129150 A1, hereinafter "Jung") in view of Shrivastava et al. (U.S. Patent No. 6,163,855, hereinafter "Shrivastava")

As to **claim 9**, Fay discloses a method for verifying an availability of a server comprising:

transmitting an availability request by a first client to the VPN server (column 4, lines 61-67; the subscribers send a request for availability);

the first client receiving a response to the availability request (column 5, lines 1-2; a real-time response from the airline servers are received);

the first client transmitting a message regarding an availability of the server to a plurality of predefinable other clients (column 2, line 66-column 3, line3; flight availability data from the real-time response may be stored in the cache database for a group of subscribers is and is used to fulfill subsequent availability requests to the airline servers) ; and

preventing a transmission of any availability requests by the plurality of predefinable other clients to the server (column 6, lines 15-17; this reduces a total number of real-time requests and real-time responses that must be handled by the system and the airlines servers)

However, Fay does not disclose the method wherein at least a prescribable period of time.

In an analogous art, Liss does disclose the method wherein availability requests are not send at least for prescribable period of time.([0028]; each of the servers transmits and receives network status data at user-configurable rates and predefined times)

At the time of the invention, it would have been obvious to a person of ordinary skilled in the art to modify Fay by incorporating a predefined time at which clients make network status requests as disclosed by Liss. The rationale behind this modification is that all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their

respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

As to **claim 10**, Fay-Liss discloses the method as claimed in 9, wherein the method is used for verifying the availability of the server in a packet-oriented communication network (Fay, column 2, lines 43-58; the plurality of subscribers sent out availability requests of which it is inherent that they are packets)

As to **claim 11**, Fay-Liss discloses a method wherein data is transmitted between the server and clients by a connectionless switch control (Fay, column 5, lines 59-67; the system transmits availability data from the server to the clients through the cache system)

As to **claim 13**, Fay-Liss does discloses a method wherein the client informs only the other clients within a same subnetwork regarding the availability of the server. (Fay, column 4, lines 65-column 5, line 3; the system sends availability request responses to clients on the network)

As to **claim 14**, Fay-Liss discloses the method as claimed in claim 9, wherein the client executes the availability requests at a time which is predefined by a timer . (Liss, [0028]; each of the servers transmits and receives network status data at user-configurable rates and predefined times)

As to **claim 15**, Fay-Liss discloses the method, wherein the first timer is reset to a predefinable value after the response to the availability request is received by the first client. (Liss, [0038]; the receiving server resets the receive timer)

As to **claim 16**, this is a computer program corresponding to method in claim 9. Therefore it has been analyzed and rejected based upon method in claim 9.

As to **claim 18**, this is a system corresponding to method in claim 9. Therefore it has been analyzed and rejected based upon method in claim 9.

As to **claim 19**, Fay-Liss discloses the method of claim 9 further comprising the first client checking to determine whether the server is at least able to respond to the availability request with an unavailability message if no confirmation message is received by the first client. (Liss, [0048]; the server compares the updated message that includes the server unavailability with the previous network status message to understand the changes in the network)

As to **claim 21**, Fay-Liss discloses the method of claim 9 further comprising the first client receiving keep alive data from the predefinable other clients.(Liss, [0042]; the each of the EMS servers delivers a message to a neighboring EMS server in a predefined order)

As to **claim 22**, Fay-Liss discloses the method of claim 9 further comprising one of the predefinable other clients transmitting a collective availability request to the server if no multicast collective request has been received by that client within a predefined time period. (Fay, [0043]; each EMS servers in the list are adds its own network status data to the network status message and forwards after a delay time)

As to **claim 23**, this is a method corresponding to method in claim 21. Therefore it has been analyzed and rejected based upon method in claim 21.

As to **claim 24**, Fay-Liss discloses the client of claim 18 further comprising a fourth device configured to monitor for receipt of a message from one of the predefinable other clients regarding availability of the server. (Fay, column 2, line 65-column 3, lines 8; the system monitors to see if any availability requests are received)

As to **claim 25**, this is a program corresponding to method in claim 21. Therefore it has been analyzed and rejected based upon method in claim 21.

As to **claim 27**, Fay-Liss discloses the client of claim 18 wherein the first device is also the third device and the first device is a transmitter or a transmission mechanism.(Liss, [0042]; each of the EMS servers delivers a message to a neighboring EMS server in a predefined order and therefore the first device can be the third device),

As to **claim 28**, Fay-Liss discloses the client of claim 18 wherein the first device, second device and third device are interconnected portions of the client. (Shrivastava, column 5, lines 25-37; the systems in the cluster are connected together)

As to **claim 29**, Fay-Liss discloses the client of claim 18 further comprising a fourth device configured to monitor for reception of a message from a prescribable further client about server availability (Fay, column 2, line 65-column 3, lines 8; the system monitors to see if any availability requests are received) and also configured to prevent transmission of an availability request to the server (Fay, column 6, lines 15-17; this reduces a total number of real-time requests and real-time responses that must be handled by the system and the airlines servers) at least for a prescribable time interval after receipt of such a message. (Liss, [0028]; each of the servers transmits and receives network status data at user-configurable rates and predefined times)

6. **Claim 12** is rejected under 35 U.S.C. 103(a) as being unpatentable over Fay in view of Liss further in view of Chen et al.(U.S. Patent Pub. No. 2002/016964 A1)

As to **claim 12**, Jung and Shrivastava as modified does not explicitly disclose the transmitting of a multicast message to the other clients in the network

In an analogous art, Chen explicitly discloses the method wherein message regarding the availability of the server is transmitted to the plurality of predefinable other clients using a multicast message to inform other clients in the cluster about server

availability information. ([0046] , [0056]; wherein when a node fails the cluster node sends information about the failure to other nodes using a multicast message).

At the time of the invention, it would have been obvious to a person of ordinary skilled in the art to modify the method disclosed by Fay-Liss as modified with the method disclosed by Chen et al. to disclose a method of transmitting messages to another peer entities in the network using multicast messages. The motivation behind this modification is to provide high availability and reliability among the nodes. (Chen, page 4, [0056])

7. **Claims 20 and 26** are rejected under 35 U.S.C. 103(a) as being unpatentable over Fay in view of Liss further in view of Nakahara(U.S. Patent Pub. No. 2004/0111492 A1, hereinafter "Nakahara")

As to **claim 20**, Jung-Shrivastava discloses the method of claim 9 however does not disclose further comprising the first client transmitting a negative availability message to the predefinable other clients if the server provided an unavailability message or if the server did not respond to the availability request within a predetermined amount of time after the availability request was sent to the server.

Nakahara does disclose the method wherein comprising the first client transmitting a negative availability message to the predefinable other clients if the server provided an unavailability message or if the server did not respond to the availability request within a predetermined amount of time after the availability request was sent to the server. ([0050]; "the proxy server receives the request for obtaining the contents from the server"... "if the reply message is not returned from the web server and the time is out, the error message is transmitted to the client")

At the time of the invention, it would have been obvious to a person of ordinary skilled in the art to modify the method disclosed by Fay-Liss as modified with the method disclosed by Nakahara to disclose a method of transmitting messages to another peer entities in the network using multicast messages. The rationale behind this modification is that all the claimed elements were known in the prior art and one skilled

in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

As to **claim 26**, this is a program corresponding to method in claim 20. Therefore it has been analyzed and rejected based upon method in claim 20.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **JOE CHACKO** whose telephone number is (571)270-3318. The examiner can normally be reached on Monday-Friday 8:30am-5pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharra can be reached on 571-272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you

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have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. C./

Examiner, Art Unit 2456

/Rupal D. Dharia/

Supervisory Patent Examiner, Art
Unit 2400